

ABSTRACT

A solar energy concentrator is formed in the shape of a spiral horn, so that solar energy incident over a wide range of incident angles on the mouth of the horn is concentrated by multiple reflections from inner walls of the horn to emerge from an exit aperture at the centre of the horn. Solar energy emerging from the collector may be distributed by light pipes to illuminate a building or may be transmitted to a solar energy conversion chamber having a small entry aperture. The entry aperture acts as black body absorbing all solar energy incident upon it and the solar energy may be converted within the chamber either by photovoltaic cells and/or by heat absorbing media.